REMARKS/ARGUMENTS

Claims 6-9, 12 and 15-19 were pending. Claims 6 and 17 have been amended. It is respectfully submitted that such amendments are supported by the application as originally filed, and that no new matter has been entered. Claims 6-9, 12 and 15-19 remain pending.

Claim Rejections under 35 U.S.C. § 102

The Examiner rejects claims 6-9, 12, 15 and 17-19 under 35 U.S.C. § 102(b) as being anticipated by Takeuchi, U.S. Patent No. 4,523,312. (Note that claim 16 is pending, but the Examiner has not provided a detailed rejection. The Examiner is respectfully requested to either provide a detailed rejection or indicate that claim 16 would be allowable.)

As set forth above, claims 6 and 17 have been amended. Support for such amendments can be seen in FIG. 2 and corresponding portions of the specification, among other places. It is respectfully submitted that Takeuchi fails to teach, indicate or suggest the features recited in claims 6 and 17.

Before turning to Takeuchi, the elements of claims 6 and 17 can be seen according to the embodiment of FIG. 2 as follows. The first output terminal in one embodiment can be seen as the junction of the collectors of Q5 and Q6. The second output terminal in one embodiment can be seen as the junction of the collectors of Q7 and Q8, marked as "OUT". The third output terminal in one embodiment can be seen as the junction of the cathode of D1 and the anode of D2, marked as "1". The fourth output terminal in one embodiment can be seen as the junction of the cathode of D3 and the anode of D4, marked as "2". The junction of the collectors of Q5 and Q6 is connected with the junction of the cathode of D1 and the anode of D2, marked as "1". The junction of the collectors of Q7 and Q8, marked as "OUT", is connected with the junction of the cathode of D3 and the anode of D4, marked as "2".

Given the above understanding, Takeuchi as understood fails to teach, indicate or suggest all the elements of claims 6 and 17, for the following three reasons, among others. First, Takeuchi as understood fails to teach, indicate or suggest a combined circuit. Second, Takeuchi

as understood fails to teach, indicate or suggest a current source for a device under test. Third, Takeuchi as understood fails to teach, indicate or suggest a direct current for a device under test.

No Combined Circuit in Takeuchi

As recited in the preamble of claims 6 and 17, the present invention is directed toward a driver circuit integrated with a load current output circuit. In other words, the present invention is directed toward a combined circuit that combines a driver circuit and a load current output circuit.

In contrast, Takeuchi as understood fails to teach, indicate or suggest a load current output circuit. At best, Takeuchi as understood may only disclose a driver circuit. Nothing in Takeuchi as understood discloses a load current output circuit such as required in a pin electronics or integrated circuit tester.

No Current Source for DUT in Takeuchi

As recited in claims 6 and 17, a device under test (DUT) supplies a load current including a direct current to the fourth output terminal. According to the embodiment of FIG. 2, such a load current output circuit for a DUT uses a constant current source (portion) as indicated by the numerals 23 and 24. A constant current source per se is known to have an infinite (in principle) or at least very large (in actuality) internal impedance.

In contrast, even if the current switching circuits 39i and 41i of Takeuchi as understood each work as a constant current source thus having an infinite or very large internal impedance, the circuits 39i and 41i of Takeuchi as understood do not work as such a current source for a DUT, but for switching a low pass filter 5i.

No Direct Current for DUT in Takeuchi

Further regarding the recitation in claims 6 and 17 that a device under test (DUT) supplies a load current including a direct current to the fourth output terminal, note that such a load current generally may be formed as digital pulses, and very often such pulses may be coded as a string of all "1"s or all "0"s. Functionally, the frequency range of such a coded string may be similar to a direct current. As recited in claims 6 and 17, a direct current is supplied to and from the DUT.

In contrast, Takeuchi as understood fails to disclose that a direct current flows to or from a device under test. Further, Takeuchi as understood cannot be modified to add direct current functionality. Assuming that the current switching circuits 39i and 41i of Takeuchi work as a constant current source for a DUT, note the condensers 35 and 36 between the circuits 39i and 41i and the device 10 of Takeuchi. Such condensers 35 and 36 in the low pass filter 5i of Takeuchi are indispensable for controlling rise and fall times of driving pulses from the driver 2i, and thus cannot be eliminated from Takeuchi as understood.

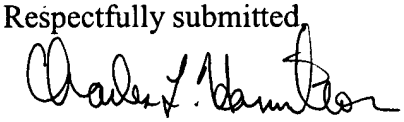
For at least the above three reasons, it is respectfully submitted that claims 6 and 17, as amended, are allowable. It is respectfully submitted that claims 7-9, 12, 15-16 and 18-19 are allowable as claims dependent from claims 6 and 17, respectively, among other reasons.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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